The Functions of Packaging

Understanding what packaging is intended for is essential if packaging is to be re-designed

**Containment:**
The kind of packaging needed to contain a product depends on the physical form of the product and the nature of the product itself. Products come in all shapes and sizes and they also react in different ways to their surroundings. For example, a corrosive chemical needs to be contained in a pack that does not allow the chemical to leak, react with its surroundings, react with its packaging or become contaminated. All need to be considered before designing or modifying the type of packaging used.

**Preservation:**
The preservation function in this context means stopping or inhibiting chemical and biological changes. The most common examples would be extending the shelf life of a food product beyond its natural life, or maintaining sterility in food or medical products. Preserving a product requires understanding of the conditions beyond which unacceptable deterioration may occur. Therefore limits must be established so that packaging can be designed to preserve a product to an acceptable level within these limits.

**Protection:**
The protection function in this context means guarding against physical damage. This could arise through shock, vibration or compression damage. Although corrugated cardboard boxes used for distribution packaging is the most recognisable example of protection against these hazards, there are many other pack types that could be employed to protect against physical damage. For example, paper pulp moulded packaging or plastic blister packaging can also be used to cushion a product.

**Convenience for Handling:**
This means all aspects of the movement and use of the product from the packaging line to final use and disposal. Handling a single product, groups of products and pallet loads etc. must be considered, as well as various transport methods, handling techniques, and storage conditions.

**Sales:**
As well as communicating factual information, a pack must be effective in promoting the contained product. This can be done by showing the product, using illustrations, branding the product name or the company that manufactures it, as well as using enticing pack shapes, colours, designs, etc. These complementary skills are normally the preserve of the sales and marketing team.